

Shiftwork and Overtime

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Four out of five employees in the Australian workforce say they do too much overtime while one in every two would prefer to work less hours and are prepared to take a pay cut to do so, according to the results of a survey conducted by independent think tank, The Australia Institute, in June 2010.

The institute has linked working longer or extended hours with a range of lifestyle illnesses such as cardiovascular disease, alcoholism and obesity; job stress related issues such as anxiety and depression have also been associated with these illnesses.

An important element of safety is that each person must be able to perform his or her duties effectively and in a way that does not threaten their own or other employees' safety or health. One of the most common reasons employees are impaired is fatigue, as it can have a major impact on a person's ability to concentrate and perform their work duties safely.

Fatigue is defined as the loss of alertness and the capacity to perform work tasks safely that results from insufficient or poor quality sleep, working at times you would normally be asleep or engaging in mentally or physically demanding activities.

The Australian Medical Association (AMA) equates the effects of fatigue with the effects of alcohol consumption on physical and mental performance; and suggests that being in an awakened state for more than 18.5 hours straight is the equivalent of having a blood alcohol level of 0.05% which is considered legally drunk in Australia.

So consider this: most responsible adults don't turn up for work drunk, but don't give a second thought to turning up to work tired or drowsy after a bad night's sleep, even though there is similar potential for impaired work performance.

SLEEP

The AMA recommends that the average adult has roughly eight hours sleep per night.

During an extended shutdown at a Karratha site in 2008, the day shift workers averaged around 7.5 hours sleep per night, while their nightshift counterparts averaged around 5.5 hours.

This means the night shift workers are in sleep debt by approximately 1.5 -2.5 hours per night, and by the end of a five day shift, are in sleep debt by approximately 7.5-12.5 hours per person.

Sleep debt, as you may have surmised, is the accumulation of the lost hours of sleep compared to the sleep you should have had. Essentially, the larger the sleep debt you carry into the following work day, the greater the tendency to fall asleep during the working shift. Therefore, the potential for a fatigue-related incident is very high.

DIET

It is recommended that individuals eat a broad range of foods including fruits, vegetables, wholegrain cereals and lean meats as well as minimal amounts of fried food. This becomes especially important on night shift because the digestive system is less active at night, hence, foods eaten are digested slower.

When working long hours, as seen during shift work, the body requires a constant supply of energy which can only be achieved from eating the right foods. During the same shutdown in 2008, the night shift workers reported a high reliance on deep fried foods, including KFC, steak and chips, sausage rolls and pies, while the day shift workers reported a healthy assortment of fruits, salads and lean meats.

Similarly, day shift workers reported average consumption of 1-2 caffeinated drinks per person during a typical shift while night shift workers reported an average of 3-5 caffeinated drinks per person. At issue here was the timing of the final serve of these caffeinated drinks related to the intended onset of sleep as it takes 4-5hrs for the body to metabolise half the amount of ingested caffeine.

Caffeine is essentially a stimulant for the central nervous system and is capable of dramatically increasing the levels of alertness for extended periods, which is precisely why it is so popular in the trucking and transport industries as well as for shift workers.

Caffeine consumption too close to the intended onset of sleep will cause lengthy delays in falling asleep and will also reduce the quality of sleep, thereby contributing to the sleep debt.

EXERCISE

Exercise is important in eliminating fatigue, as exercise helps to achieve better quality deep sleep, and also increases energy levels by making the energy burning processes of muscle activity more efficient. Only 28% of the workforce during the shutdown took part in some form of physical activity or exercise outside of work hours with most mistakenly believing that, because they have completed a 12-hour shift, they have been physically active for 12hours. Studies from the United States have indicated that people who regularly complain of fatigue can increase their energy levels by 20% and decrease their fatigue by 65% by engaging in regular, low intensity exercise.

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